[edit] Booting up an SC-40 Host

Booting up an SC-40 host from power up involves loading the system microcode which is stored on a hard disk within the host. This process involves loading the correct microcode into the various channels on the host. After the microcode is loaded and the boots program has loaded, then the CompuServe Monitor is booted to start the operating system, mount the disks, and make the system ready for use.

When powering up the host, if the following messages appear on the console, the hard disk within the host which stores the microcode is not accessible.

```
Unit 00: home block read error 01
Unit 01: no response
Unit 02: no response
Unit 03: no response
Unit 04: no response
Unit 05: no response
```

You will need to check power to the disk. If the disk itself has gone bad, you will need to replace it with a disk from a SC-40 in storage.

[edit] Example of Booting Host and turning answering on

Commands and responses are within the { } in the output below

```
NSP>halt
NSP>{take pini40}
NSP>select cpu0
[Select unit=CPU0 - N1KL]
NSP>set cpu dte 1 front-end
NSP>set cpu dte 1 privileged
NSP>set clock 30
[Command file completed PINI40.CMD]
[Clock speed=300]
NSP>{sel chn1}
[Select unit=CHN1 - FI]
NSP>{load m}
.............Downloading 6178 bytes ab0 syms 66c strings.
Verifying 6178 bytes ab0 syms 66c strings.
NSP>{sel cpu0}
[Select unit=CPU0 - N1KL]
NSP>{assign chan 1 1}
NSP>{run boot40}
%Starting CPU0
......


Clearing memory...
Boots %25B(161)
```

Checking SX0 FX1 SX2 RH3 SX4 RH5 RH6 RH7

BTS> {Enter Return}

CompuServe GHU299 (built 1:13:59 PM Monday, June 15, 2009 in [340,105])
    (last reloaded 1:38:00 PM Wednesday, June 17, 2009)

Why reload? BECAUSE I FELT LIKE IT!!

Code: {Enter Return}

% ONCPCL Processor clock = 30.0 ns (33 MHz)
% Busy device at SX = 2, bus = 1, kon = 1, lun = 0....................timed
out

% More SCSI channels defined than adapters found

SCSI device status:
  Disk:

Chn	Bus	SCSI id	Unit	Vendor	Product Id	Rev	Serial number
0	0	0	DZA0	SEAGATE	ST34371W	0484	JDA469280DH5U1
0	0	1	DZA1	SEAGATE	ST32550N	0014	02594716
0	0	2	DZA2	SEAGATE	ST34573WD	6244	LN94234000001927
0	0	3	DZA3	SEAGATE	ST39173WD	6244	LMF5612300001936
0	0	4	DZA4	SEAGATE	ST34371W	0280	JD9370300JYMBQ
0	0	5	DZA5	SEAGATE	ST34371W	0484	JD5879950CE3QT
0	0	6	DZA6	SEAGATE	ST19171W	0024	LA809954
0	1	0	DZB0	SEAGATE	ST34573WD	6244	LNA4183000001932
0	1	1	DZB1	SEAGATE	ST34573WD	6244	LN96093900001927
0	1	2	DZB2	SEAGATE	ST34371W	0484	JD5952510CFC6H
0	1	4	DZB4	SEAGATE	ST34573WD	6244	LN94233800001928
0	1	6	DZB6	SEAGATE	ST32550N	0022	02190228

    This monitor is configured for 14 controllers (12 online, could add 2
more).

  Tape:

Chn	Bus	SCSI id	Ctl	Vendor	Product Id	Rev	Units
2	1	0	MZA0	ARCHIVE	Python 04106-XXX	7550	0

    This monitor is configured for 4 controllers (1 online, could add 3
more).

  Communication:

Chn	Bus	SCSI id	Type	Vendor	Product Id	Rev	D	V
1			fddi	SC	FX			

% KLXCOL Controller MZ? is off line

```
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[Loading nnames tables.]
[FX initialized, IP addr = 172.26.24.73, hardware addr = 08:00:58:00:01:01]
[Checking network links...AFA is available]

% Should have 3 or more network links but only 1 is up.  Bad nodes?  DIPLs?
% Proceed with reload anyway? '''Y'''
Operator ID: '''TOM'''
[Reading WWVB clock.]
% Can't get to WWVB clock (X27CDD).
% Invalid data from WWVB clock (X27DUA):
?

Enter the date and time (e.g., 1-JAN:2230)
{17-NOV:1435'''}
[It's now about 2:35 PM EST Tuesday, November 17, 2009 (per operator)]
[STRSAJ Starting autostart jobs]

;;VERSSR: [107,33] job 28, 17-Nov-09 14:35    **** M E S S A G E ****
? Cannot find SPT:VERSSR

;;BILDAE: [1,2] job 8, 17-Nov-09 14:35    **** M E S S A G E ****
% BLDLHL Last entry in HOLIDAY file less than 45 days away
OPRHOR - WARNING, Host Status Table Over Run.
OPRTPN - WARNING, Host Status Table Inquiry Failed.

;;EMDXFR: [1,2] job 11, 17-Nov-09 14:35    **** M E S S A G E ****
EMDQUE(EMDXFR-GHU) Level = 2 Event = 100 Count = 1


;;EMDXFR: [1,2] job 11, 17-Nov-09 14:35    **** M E S S A G E ****
EMDQUE(EMDXFR-GHU) Level = 2 Event = 100 Count = 1 - PERF COMMENT = Daemon
star
OPRLPN - WARNING, LOCAL Server PID NOT Found
OPRPSN - WARNING, PRIMARY Server PID NOT Found
OPRSSN - WARNING, SECOND Server PID NOT Found
OPRTSN - WARNING, THIRD Server PID NOT Found
[OPRPAF Processing auto command file]
:LIBRARY [1,103]
:FORCE OFF
:SLOGIN 1.2;OPCON
:DEFINE OPC=
:SLOGIN 1.2;ATOLIB

;;SYSDIS: [2,10] job 22, 17-Nov-09 14:35    **** M E S S A G E ****
% SDSANO Answering off for all terminals
14:35:12(OPC\1)
        Job 2 on GHU at 14:35 EST 17-Nov-09 on TTYP11
        Class = .OPR
14:35:12(1)
        Job 28 on GHU at 14:35 EST 17-Nov-09 on TTYP12
        Class = .OPR

;;EMDXF2: [1,2] job 12, 17-Nov-09 14:35    **** M E S S A G E ****
```

EMDQUE(EMDXF2-GHU) Level = 2 Event = 100 Count = 1

;;EMDXF2: [1,2] job 12, 17-Nov-09 14:35   **** M E S S A G E ****
EMDQUE(EMDXF2-GHU) Level = 2 Event = 100 Count = 1 - PERF COMMENT = Daemon
star
:DEFINE WORK=
:SLOGIN 1.2;ATOLIB

;;EMDQUE: [1,2] job 10, 17-Nov-09 14:35   **** M E S S A G E ****
EMDQUE(EMDQUE-GHU) Level = 2 Event = 100 Count = 1

;;EMDQUE: [1,2] job 10, 17-Nov-09 14:35   **** M E S S A G E ****
EMDQUE(EMDQUE-GHU) Level = 2 Event = 100 Count = 1 - PERF COMMENT = Daemon
star
:DEFINE OPR=
:SLOGIN 1.2;ATOLIB
14:35:15(WORK\3)
        MTA15: => MZA00:
      OK
14:35:15(OPR\3)
        Job 29 on GHU at 14:35 EST 17-Nov-09 on TTYP13
        Class = .OPR
          MTA15: => MZA00:
      OK
14:35:15(3)
        Job 30 on GHU at 14:35 EST 17-Nov-09 on TTYP14
        Class = .OPR
          MTA15: => MZA00:
      OK
:DEFINE CHK=
OPR-R SPT:CHKSRU
:SL 103.3;HSTCHK
14:35:17(OPC\4)
        OPCON Version 1J(1466) on System GHU at 17-Nov-09 14:35:16
        Function   State
        MOUNT   Active
        Device(Type) Status   Tape   Mount Count
        DZA0:(M1800) Active GKU: (29)
        DZA1:(M1800) Active MOU: (5)
        DZA2:(M1800) Active SMB: (5)
        DZA3:(M1800) Active MUU: (5)
        DZA4:(M1800) Active ISC: (6)
        DZA5:(M1800) Active SSRA: (3)
        DZA6:(M1800) Active SSA: (5)
        DZB0:(M1800) Active SML: (5)
        DZB1:(M1800) Active ISB: (7)
        DZB2:(M1800) Active SMN: (5)
        DZB4:(M1800) Active IMU: (5)
        DZB6:(M1800) Active MUW: (5)
14:35:18(OPR\4)
        CHKSRU V1B
        ! Checking SRU generation at 17-Nov-09 14:35:16 EST
        ! CHKSRU: Acceptable Result:
          99 is within 10% of 100
        OK

```
14:35:18(4)
         Job 31 on HSTCHK Area at 14:35 EST 17-Nov-09 on TTYP15
         Class = .INH
:W OPR
OPR       29        1,2               CHKSRU   ^C       149
:SET SERV 0 ON
OPRSPN - Server PID # 0 Set On
:SET FORW 0 ON
OPRSFN - Forward to OPR # 0 Set On
:SET CLIE 0 ON
OPRSCN - Client Display to # 0 Set On
:SET CLIE 1 ON
OPRSCN - Client Display to # 1 Set On
:TEST
OPRSUT - SENOP$ UUO Returned True
SYSTEM LOG LOCAL ON
;OPSER STARTM.ATO FILE
:AUTO /<2359 AT2400.ATO[103,700]
:AUTO /<2200 AT2200.ATO[103,700]
%OPRSPR superseding previous :AUTO request
14:35:19(OPR)
         1435 EST 17 Nov 2009
         OK
:AUTO /<2000 AT2000.ATO[103,700]
%OPRSPR superseding previous :AUTO request
:AUTO /<1800 AT1800.ATO[103,700]
%OPRSPR superseding previous :AUTO request
:AUTO /<1600 AT1600.ATO[103,700]
%OPRSPR superseding previous :AUTO request
:AUTO /<1400 AT1400.ATO[103,700]
:AUTO /<1200 AT1200.ATO[103,700]
:AUTO /<1000 AT1000.ATO[103,700]
:AUTO /<0800 AT0800.ATO[103,700]
:AUTO /<0600 AT0600.ATO[103,700]
:AUTO /<0400 AT0400.ATO[103,700]
:AUTO /<0200 AT0200.ATO[103,700]
:WHAT ALL
OPC       2         1,2               OPCON    SL       60
WORK      28        1,2               DEFINE   ^C       60
OPR       29        1,2               SYSTEM   ^C       150
CHK       30        1,2               DEFINE   ^C       60
4         31        103,3             LOGOUT   TO       472
Next auto file is: AT1600 AT 16:00:00
14:35:20(4\OPR)
         Off at 14:35 EST 17-Nov-09
         SRU's used = 478
         Connect time = 00:01
!
;;GHUDSP(10) - OPSER: [1,2] job 1, 17-Nov-09 14:35:19   **** MESSAGE ****
this message is a test, it is only a loop back test...


OPRDNS - WARNING, Display Message NOT Sent
OPRPSF - WARNING, OPSER_PRIMARY PID Send Failure # 2


!
!W; ALLU^C
```

```
?OPRJRO Job(s) running on OPC,WORK,OPR,CHK
?OPRJRO Type ":KILL ALL" to kill the subjobs
OPRHOR - WARNING, Host Status Table Over Run.
OPRTPN - WARNING, Host Status Table Inquiry Failed.
:OPRPSN - WARNING, PRIMARY Server PID NOT Found
W OPRSSN - WARNING, SECOND Server PID NOT Found
ALOPRTSN - WARNING, THIRD Server PID NOT Found
!L
OPC      2         1,2              OPCON    SL      61
WORK     28        1,2              DEFINE   ^C      60
OPR      29        1,2              SYSTEM   ^C      150
CHK      30        1,2              DEFINE   ^C      60
Next auto file is: AT1600 AT 15:59:59
!'''SYSTEM L ON'''
!
!14:36:31(OPR)
       % SYSTIM Time and date were set manually, so might be wrong.
                Are you sure it's now 2:36 PM EST Tuesday, November 17,
2009? {YES}
       Operator ID: {TOM}
!14:36:43(OPR)
       1436 EST 17 Nov 2009
       OK
```